

ATTACHMENT 6: SYSTEM MONITORING TO VERIFY WATER AND ENERGY SAVINGS

WATER

Water consumption is stated on the water invoices charged by the water supplier, El Dorado Irrigation District (EID) to the Headington facility. Reductions in water usage, identified by comparing water invoices from similar periods before and after Project implementation, can be attributed to the success of the Project.

WASTEWATER

The wastewater from the Headington Wash Rack Facility is collected and discharged to the local sewer line also serviced and managed by the supplier, El Dorado Irrigation District (EID). Since the existing (pre-construction) condition of the Headington facility includes a sewer connection, the El Dorado Irrigation District (EID) assumes (through its customer rate calculations) that all of the treated water delivered to the site is then discharged as sewage subject to wastewater treatment charges. The drain that currently delivers wastewater to the sewage system will be disconnected and plugged. This will be verified by the County of El Dorado, and the El Dorado Irrigation District once construction of the system has been completed. Since no wastewater will enter the sewage line after completion of the improvements, no further monitoring will be necessary.

ELECTRICITY

The electricity meter at the Headington Wash Rack Facility records the use of several industrial applications. Engineering calculations have determined that the new wash rack treatment and recycle system will use 14,976 kWh per year on average. This number was determined by estimating the power usage required to energize the pumps and electrical equipment necessary to operate the new wash rack system. This amount will be more than offset by solar panels which are estimated to produce 15,872 kWh per year. The variability of other applications that occur at the site will obscure short term energy savings, however, a reduction of approximately 896 kWh should be apparent when the electrical bills from the year before Project implementation are compared with the electrical bills for the year after Project implementation. Also, the electricity savings as a result of import water consumption reductions and waste water reductions will be monitored and reported through the El Dorado Irrigation District invoices (EID).